



# 2010 CHILD FATALITY REVIEW FOR MARICOPA COUNTY

## **DEMOGRAPHICS**

During 2010, 486 children who resided in Maricopa County died before reaching their 18<sup>th</sup> birthdays. Males accounted for 58 percent of child deaths in this county (n=283) and females accounted for 42 percent (n=203). Figure 1 shows deaths among children by sex and age group.

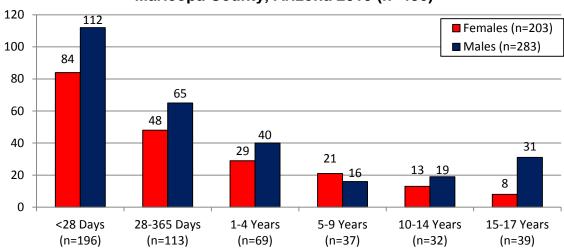


Figure 1. Deaths Among Children by Sex and Age Group, Maricopa County, Arizona 2010 (n=486)

Deaths were over-represented among African American, Asian, and Hispanic children in Maricopa County in 2010. African American children comprised six percent of the population but 11 percent of the fatalities (n=52). Asian children comprised three percent of the population but six percent of the fatalities (n=28). Hispanic children comprised 42 percent of the population but 47 percent of the fatalities (n=228). Non-Hispanic White children comprised 43 percent of the population and 34 percent of the fatalities (n=165).

## **CAUSE AND MANNER OF CHILD FATALITIES**

Sixty-five percent of deaths were due to natural manners (n=318), 19 percent were due to accidents (n=92), nine percent were undetermined (n=42), five percent were homicides (n=23), two percent were suicides (n=10) and less than one percent were of an unknown manner (n=1). Figure 2 shows deaths among children by manner.

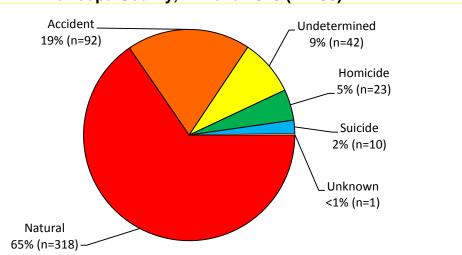


Figure 2. Deaths Among Children by Manner, Maricopa County, Arizona 2010 (n=486)

There were 318 child deaths classified as natural, including 194 from medical causes, 118 from prematurity, and one from Sudden Infant Death Syndrome (SIDS). Thirty-two children died in motor vehicle crashes, 23 children died from suffocation, 22 children drowned, 16 children died from firearm injuries, 10 children were poisoned and nine children died from blunt force trauma. Table 1 shows deaths among children by cause and manner.

Table 1. Deaths Among Children by Cause and Manner, Maricopa County, Arizona 2010 (n=486)							
Cause	Natural	Accident	Undetermined	Homicide	Suicide	Unknown	Total
Medical*	194	0	1	0	0	0	195
Prematurity	118	0	0	0	0	0	118
Motor Vehicle Crash	0	31	0	1	0	0	32
Firearm	0	1	0	10	5	0	16
Suffocation	0	21	1	0	1	0	23
Drowning	0	22	0	0	0	0	22
SIDS	1	0	0	0	0	0	1
Blunt Force Trauma	0	0	0	9	0	0	9
Hanging	0	1	0	0	4	0	5
Undetermined	5	0	38	0	0	1	44
Other Non-Medical	0	1	0	0	0	0	1
Poisoning	0	8	2	0	0	0	10
Fire/Burn	0	1	0	0	0	0	1
Exposure	0	2	0	1	0	0	3
Fall/Crush	0	2	0	0	0	0	2
Other Injury	0	2	0	2	0	0	4
Total	318	92	42	23	10	1	486
*Excluding Prematurity and SIDS							

Among the 32 motor vehicle crash deaths, 17 children were passengers, 10 were pedestrians, two were drivers and two were on bicycles. Eight children were driving, 11 children were pedestrians, and two children were on bicycles. Of the 17 children who were passengers at the time of the fatal crash, 5 were in the front seat, 11 were in the back seat and for one child the location was unknown.

### **PREVENTABILITY**

Child Fatality Review Teams consider a child's death preventable if something could have been done (by an individual such as the caregiver or supervisor, or by the community as a whole) that would have prevented the death. The Local Child Fatality Review Team determined that 37 percent of the deaths among Maricopa County children could have been prevented (n=181).

During the review of each child's death, teams identify factors believed to have contributed to the death. Although the presence of a contributing factor typically led to the determination that a death was preventable, this was not always the case. For example, the team might have concluded that an unsafe sleep environment (e.g. infant left sleeping on a couch) was a contributing factor in an unexpected infant death. However, the team may not have had sufficient information (e.g. autopsy report, adequate scene investigation) to determine if the death could have been prevented.

In Maricopa County, substance use (including alcohol) was a contributing factor in 99 child deaths (20 percent), and lack of supervision contributed to 95 deaths (20 percent). Unsafe infant sleeping environments contributed to 24 deaths (five percent), and lack of vehicle restraints was a factor in 13 deaths (three percent). More than one factor may have been identified for each death. Table 2 shows the most common factors contributing to the deaths of child residents of Maricopa County.

Table 2. Contributing Factors for Deaths Among Children, Maricopa County, Arizona 2010				
Factor*	Percent			
Substance use	99	20%		
Lack of supervision	95	20%		
Co-sleeping 24 5%				
Lack of motor vehicle restraint 13 3%				
*More than one factor may have been identified for each death				

### CHILD FATALITIES IN MARICOPA COUNTY COMPARED TO OTHER ARIZONA COUNTIES

This section provides comparisons between the deaths of children who resided in Maricopa County and the deaths of children who resided in the remaining 14 Arizona counties. During 2010, 486 children who were residents of Maricopa County died, and 355 children died who were residents of the other 14 counties.

Maricopa County had a crude rate of 48.2 child deaths per 100,000 residents, a lower rate than the remainder of the state (57.2 deaths per 100,000 residents). Thirty-seven percent of the deaths of Maricopa County children could have been prevented (n=181), and 28 percent of the child deaths in the remaining counties were determined to have been preventable (n=98).

Medical conditions were the leading cause of child deaths in Maricopa County (40 percent), as well as for the remainder of Arizona (45 percent). Prematurity accounted for 24 percent of deaths in Maricopa County and comprised 21 percent of child deaths in the rest of Arizona. Undetermined deaths accounted for nine percent of the child deaths in Maricopa County and eight percent in the remaining counties. Motor vehicle crashes accounted for seven percent of the deaths in Maricopa County, the same as the rest of Arizona. Table 3 shows the leading causes of child deaths for Maricopa County compared to the rest of Arizona.

Table 3. Leading Causes of Child Deaths, Maricopa County, Arizona 2010					
Maricopa County (n=486)		Arizona, Excluding Maricopa County (n=355)			
Cause	Percent of Deaths	Cause	Percent of Deaths		
Medical	40%	Medical	45%		
Prematurity	24%	Prematurity	21%		
Undetermined	9%	Undetermined	8%		
Motor Vehicle Crash	7%	Motor Vehicle Crash	7%		

In Maricopa County, the largest percentage of deaths were natural (65 percent), and in the remaining counties, natural deaths accounted for 67 percent of child deaths. Accidents accounted for 19 percent of child deaths in Maricopa County and 16 percent in the remaining counties. There was a larger percentage of homicides in Maricopa County (five percent), compared to the rest of the state (three percent). Suicides accounted for two percent of child deaths in Maricopa County, but four percent in the remaining counties. Table 4 shows deaths among children by manner for Maricopa County compared to the rest of Arizona.

Table 4. Deaths Among Children by Manner, Maricopa County, Arizona 2010					
Maricopa County (n=486)		Arizona, Excluding Maricopa County (n=355)			
Manner	Percent of Deaths	Manner	Percent of Deaths		
Natural	65%	Natural	67%		
Accident	19%	Accident	16%		
Suicide	2%	Suicide	4%		
Homicide	5%	Homicide	3%		
Undetermined	9%	Undetermined	9%		
Unknown	<1%	Unknown	<1%		